



Appl. No.: 10/701,036

Amendment C

Responsive to an Office Action mailed Jan. 6, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 - 45 (Canceled).

46. (currently amended) A detector comprising:

a housing;

a gas sensor carried by the housing, the sensor defining an internal sensing region with at least a first opening for an inflow of gas carrying fluid; and

a first, metal, condenser with second openings therethrough, the condenser is carried in the housing adjacent to the sensor with the first and second openings aligned for a fluid inflow from outside of the housing into the sensing region, the inflow of fluid spreading through the sensing region by diffusion; and

which includes a membrane filter carried by the housing, the filter overlying at least some of the second openings.

47. (canceled)

48. (currently amended) A detector as in claim 47 ~~46~~ where the filter, condenser and sensing region are arranged in a stacked relationship along a line corresponding to a direction of fluid flow.

49. (currently amended) ~~A detector as in claim 47~~ A detector comprising:

a housing;

a gas sensor carried by the housing, the sensor defining an internal sensing region with at least a first opening for an inflow of gas carrying fluid;

a first, metal, condenser with second openings therethrough, the condenser is carried in the housing adjacent to the sensor with the first and second openings aligned for a fluid inflow from outside of the housing into the sensing region, the inflow of fluid spreading through the sensing region by diffusion;

a first filter carried by the housing, the filter overlying at least some of the second openings, and

which includes a second filter, carried by the housing, displaced from the first filter where the filters, the condenser and the sensing region are arranged in a stacked relationship along a line corresponding to a direction of fluid flow.

50. (previously presented) A detector as in claim 49 where one of the filters blocks a flow-through of larger molecules than does the other.

51. (previously presented) A detector as in claim 49 where one filter is located closer to the sensor than is the other filter.

52. (previously presented) A detector as in claim 51 which includes a second, metal, condenser in stacked relationship with the first metal condenser, the second condenser having third openings therethrough.

53. (previously presented) A detector as in claim 52 with the first condenser positioned between the filters.

54. (previously presented) A detector as in claim 52 with one of the condensers positioned between the filters, and where the condensers are spaced apart from one another.

55. (previously presented) A detector comprising:

at least two perforated, metal condensers with a membrane-type filter therebetween; and

a gas sensor with at least a gas inflow port, the condensers and filter are located adjacent to the gas sensor so as to provide a gas inflow path through the perforations, the filter and the gas inflow port into the gas sensor.

56. (previously presented) A detector as in claim 55 which includes a second filter with at least one condenser located between the filters.

57. (previously presented) A detector as in claim 55 where the condensers, the filter and the sensor are carried by a common housing.

58. (previously presented) A detector as in claim 57 where the housing defines gas inflow openings with an internal gas flow path extending between the gas inflow openings and the sensor.

59. (previously presented) A detector as in claim 58 which includes a gas outflow.

60. (previously presented) A detector as in claim 56 with the condensers spaced apart from one another.

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61. (previously presented) A detector as in claim 60 with one of the condensers located in the gas sensor.

62. (previously presented) A detector comprising:

- a perforated housing;

- at least one perforated metal condenser carried in the housing; and

- a membrane filter that overlies at least some perforations of the housing;

- a gas sensing region in the housing with the at least one perforated metal condenser positioned adjacent thereto, with perforations of the housing, the filter and perforations of the metal condenser forming a fluid inflow path into the gas sensing region.

63. (previously presented) A detector as in claim 62 which includes a second, perforated metal condenser with the filter positioned between the condensers.